Patent Application No. 10/030,452 Masayuki YABUTA et al.

October 19, 2005 Attorney Docket No. 58777.000008

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the

application.

Listing of Claims:

Claims 1 and 2 (canceled)

Claim 3 (previously presented): The method as defined in Claim 9 or 10 wherein the host

cell is a prokaryotic cell or an eukaryotic cell.

Claim 4 (previously presented): The method as defined in Claim 3 wherein the host cell

is a microorganism.

Claim 5 (previously presented): The method as defined in Claim 4 wherein the

microorganism is Escherichia coli.

Claim 6 (previously presented): The method as defined in any one of Claims 9 and 10

wherein the molecular weight of the polypeptide comprising a serine residue is about 1000 to

20000.

Claim 7 (canceled).

Claim 8 (currently amended): The method as defined in any one of Claims 9 and 10

wherein the atrial natriuretic peptide is human atrial natriuretic peptide.

Claim 9 (previously presented): A method for reducing formation of a byproduct

polypeptide comprising an O-acetylserine residue in place of a serine residue, comprising:

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(i) culturing, in a medium, transformed host cells that produce a recombinant atrial

natriuretic peptide comprising a serine residue and a byproduct polypeptide comprising an O-

acetylserine residue in place of a serine residue;

(ii) adding to said medium at least one of histidine, methionine or glycine in an

amount effective to reduce said byproduct formation; and

(iii) reducing the formation of said byproduct polypeptide.

Claim 10 (previously presented): A method for producing a polypeptide comprising a

serine residue comprising:

(i) culturing, in a medium, transformed host cells that produce a recombinant atrial

natriuretic peptide comprising a serine residue and a byproduct polypeptide comprising an O-

acetylserine residue in place of a serine residue;

(ii) adding at least one of histidine, methionine or glycine to the medium in an

amount effective to reduce said byproduct formation; and

(iii) reducing the formation of said byproduct polypeptide.

Claim 11 (currently amended): A culture medium comprising:

(i) transformed host cells that produce a recombinant polypeptide atrial natriuretic

peptide comprising a serine residue and a byproduct polypeptide comprising an O-acetylserine

residue in place of a serine residue;

(ii) at least one of histidine, methionine or glycine added to the medium in an amount

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effective to reduce formation of a byproduct polypeptide comprising O-acetylserine residue in place of a serine residue; and

(iii) a reduced formation of said byproduct polypeptide as compared with a control medium with no histidine, methionine or glycine added.

Claim 12 (previously presented): The culture medium of claim 11 wherein the formation of said byproduct polypeptide is reduced in an amount greater than or equal to 50% as compared with said control medium.